

CASE STUDY

PVC WATER WELL CASING GAINS GROUND WITH IDAHO DRILLING PROFESSIONALS

In Idaho's fast-growing Treasure Valley region, unprecedented population growth has led to heightened demand for new water supply wells. In response, drilling contractors are turning to durable, easy-to-install PVC well casing to rehabilitate and extend the life of older wells impacted by the area's moderately corrosive waters.

CHALLENGE

The use of PVC well casing has historically faced an uphill climb in environmentally sensitive areas of Idaho where drilling professionals were at one time required to secure a state government waiver to use the product. Moreover, steel well casings remain the standard in the state, where 80 percent of drilled wells are drill-and-drive air rotary domestic wells versus the open-hole drilling method which facilitates the use of PVC.

APPLICATION

Drilling professionals continue to work with state groundwater agencies to promote the benefits of PVC well casing and the open-hole drilling methods that facilitate its use.

"We're making it easier for Idaho well-drilling professionals to include PVC in their projects," says Ed Squires, president of Hydro Logic, Inc. a hydrogeological consulting firm in Boise. "Over time, it's helping us gain a foothold with an impressive number of highly productive and trouble-free plastic wells now in use."

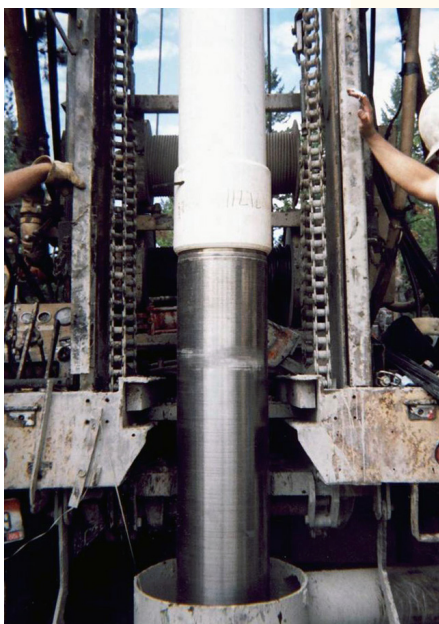
SOLUTION

Hydro Logic has designed and inspected the construction, development and testing of about 300 large-bore municipal, commercial and irrigation supply wells in Idaho using Certa-Lok® SDR 17 PVC Well Casing from Westlake Pipe & Fittings.

The company incorporated the PVC product in the installation of four wells in Meridian and Caldwell, Idaho and the irrigation, snowmaking, and municipal wells of Tamarack Resort, a year-round mountain resort in Donnelly, Idaho.

In Meridian, Hydro Logic engineered the state's first large-diameter municipal well with PVC casing. It also designed PVC supply wells for other applications across Idaho including a supply well for the PepsiCo soft drink bottling plant in Nampa.

Unlike steel well casings which support the growth of iron bacteria and associated slimes, PVC well casings withstand the impact of electrolytic and galvanic corrosion, chlorine-based disinfectants and highly corrosive acids used for well rehabilitation.



Project Type:
Water Well

Application:
Domestic Well

Product Used:
Certa-Lok® PVC
Well Casing

Contractor:
Treasure Valley Drilling &
Pump Inc.

Engineer:
Hydro Logic, Inc.

Hydro Logic's drilling contractors also point to the product's ease of installation with couplings that lock and seal each casing length. "We can set 600 feet of 17-inch PVC casing in place in less than a day," says John Post, president of Treasure Valley Drilling & Pump of Weiser, Idaho. "That would have taken us two days with a steel casing.

He adds, "The Certa-Lok casing fits together beautifully and helps the entire well go in much quicker. It's excellent for direct mud rotary or reverse rotary open-hole drilling."